大腿小蜂 *Brachymeria* Westwood 属 *Matsumurameria* Habu 亚属纪录并记述我国云南产三新种

（膜翅目：小蜂总科：小蜂科）

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关键词　大腿小蜂属　小蜂三新种　景东大腿小蜂　台湾大腿小蜂　金平大腿小蜂　琉球大腿小蜂　芒市大腿小蜂　云南

大腿小蜂属 *Brachymeria* Westwood 的昆虫分布广，体形大，种类逾百；由于它们的寄主比较广泛，鳞翅目、双翅目（蝇类），甚至某些膜翅目昆虫均被它们寄生，这些寄主中不少是重要的农林害虫，例如菜青虫、松毛虫、粘虫、舞毒蛾、美国白蛾、玉米螟、杨树舟蛾……等，因此对大腿小蜂属的研究是有一定经济意义的。本属小蜂经 Habu (1960) 研究发现某些种类其后唇基与颜面间分界不清，例如 *Chalcis taiwana* Matsumura 即是这样，并以此为属模建立亚属 *Matsumurameria* Habu；同年 Burks 整理北美大腿小蜂属确认这个亚属，同时又另建立了 *Gahanula* 及 *Pseudobrachymeria* 两个亚属，以及1974年 Steffan 所建的 *Caenobrachymeria* 亚属，连同 Masi 1929 所建立的 *Neobrachymeria* 亚属，到目前为止 *Brachymeria* Westwood 属下共有六个亚属。现仅就存于中国科学院动物研究所的 *Matsumurameria* Habu 亚属标本加以整理，计共得五种，内中除台湾大腿小蜂 *B.*(*M.*) *taiwana* (Matsumura) 及琉球大腿小蜂 *B.*(*M.*) *ryukyuensis* Habu 外，记述了三个新种。现将 *Matsumurameria* Habu 亚属的五种检索如下：

1. 眶前脊无，眶后脊有 …………………………………………………………… 2
   眶前、后脊均无；腹除背板两侧缘、腹末背拱及产卵器呈透明暗红黑色外余黑色；后足基节黑色，末端红褐色；腿节及胫节桔红色，腿节黄色端斑小，胫节近基部和端部具黄色斑；翅基片基部黄色，上侧褐至黑褐色，小盾片末端具凹缘 ………………………… 景东大腿小蜂 *B.*(*M.*) *jingdongensis* sp. nov.
2. 后足胫节黄色；唇基中部背侧与颜面愈合，仅可见光滑的端部 ………………… 台湾大腿小蜂 *B.*(*M.*) *taiwana* (Matsumura)（广东、海南）
   后足胫节黑色唯端部及近基部一小点呈黄色斑 …………………………………… 3
3. 眶后脊完整，达颊区后缘 ………………………………………………………… 4

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眶后脊不完整，不达颊区后缘……………………………………金平大腿小蜂 *B.(M.) jinpingensis* sp. nov.

4.眶后脊不分枝……………………………………………琉球大腿小蜂 *B.(M.) ryukyuensis* Habu（江西、牯岭）

眶后脊细、分枝……………………………………………………芒市大腿小蜂 *B.(M.) mangshiensis* sp. nov.

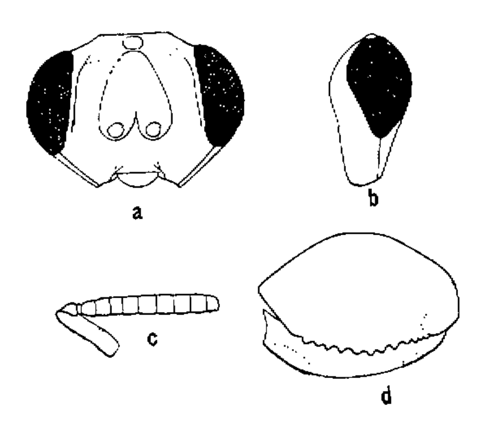


图1 景东大腿小蜂

Fig. 1 *Brachymeria (Matsumurameria) jingdongensis* sp. n. (Female).
a. Head (frontal view); b. Head (lateral view); c. Antenna; d. Femur and tibia of hind leg.
a. 头（正面观） b. 头（侧面观）
c. 触角 d. 后足腿节和胫节

1.景东大腿小蜂 *Brachymeria (Matsumurameria) jingdongensis*，**新种**

♀ 体长4.2毫米，黑色，但触角黑褐色，支角突黄褐色；上颚端部红褐色；翅基片黄微带褐色，基部及上侧方褐色；翅透明，翅脉褐色；前、中足基节、转节和腿节基部黑褐色，中部褐色，端部黄色，胫节除两端黄色外为褐色；后足基节黑色，末端红褐色，转节和腿节以及胫节桔红色，腿节末端，胫节近基部和近端部具黄色斑；腿节腹缘之齿及胫节腹面紫褐黑色；跗节黄色；爪黑褐色；体毛银白色；腹部背板腹侧缘、腹端背拱及产卵器鞘暗红色。头（图1—*a*）与胸等宽或略宽于胸，正面观明显横宽，复眼较小；颜面较宽且平坦，仅触角洼两侧部分略向触角洼倾斜下陷，颜面下部密布略呈纵走方向的网状皱纹，上部则具刻点和毛，刻点间脊具彫纹；触角洼深、光滑、有边缘；眶前脊不明显，仅中部一段细微，其基部与颜颊缝不相连；颜颊缝光滑微隆起；无眶后脊（图1—*b*），颊区下部较平坦，密生长毛；唇基缝不显；触角（图1—*c*）棒节端部平截，顶端中央稍内凹。胸部刻点较浅而稀，刻点间隙平滑有彫纹，刻点间距等于或大于刻点本身之径长，刻点中心具细长毛；小盾片短宽，末端圆，表面较平坦，中部以后缓向后倾斜，刻点圆而浅；后足基节腹面具细密刻点和长毛，内侧有较密的毛刷区，毛长又粗，背面光滑无毛；后足腿节（图1—*d*）腹缘具13个齿。前翅亚缘脉为缘脉长的2倍；缘脉为后缘脉长的2.5倍；后缘脉为痣脉长的2倍。腹部卵圆形，侧面观末端近竖直，第1节背板中部光滑无毛，刻点微小；第2节背板除与第1节相同的微小刻点外，两侧并具鬃毛刻点；第3至第5节的每节背板基部具横走方向细密纹，端部具2—3横列不整齐的刻点和长毛；第6节背板具鱼鳞状排列的密而粗的刻点和鬃毛；刻点内具彫纹，腹端背拱侧扁成脊，肛下板深、内凹，产卵器不露出体外。

♂ 体长3.8—4.2毫米。

正模♀，配模♂，副模1♂，云南景东县，1974．v．4．毛金龙采。

本种和 *B.*(*M.*) *criculae* (Kohl) 相似，区别为：后足基部黑色仅末端红褐色，腿节黄色端斑小；胫节近基部和端部具黄色斑，翅基片基部及上侧方褐至黑褐色〔*B.*(*M.*)*criculae* 的翅基片为纯黄色〕。腹部除背板两侧缘、腹末背拱及产卵器呈透明暗黑红色外余黑色，不呈褐红色，在触角洼下方的颜面与唇基相接处具有大刻点，外光滑并具纵走方向的皱纹，只在口角两侧上方之颜面部分方具稠密的银白色刚毛（*criculae* 则触角洼与唇基间除有一小光滑面外具稠密刚毛）；中胸盾侧片及三角片上的刻点与中胸盾片后端及小盾片的刻点一致，并不显模糊微弱，小盾片末端具凹缘（在 *criculae* 则圆而不呈凹缘），又第6腹节背板所具齐集刻点排成8列而 *criculae* 只6列。

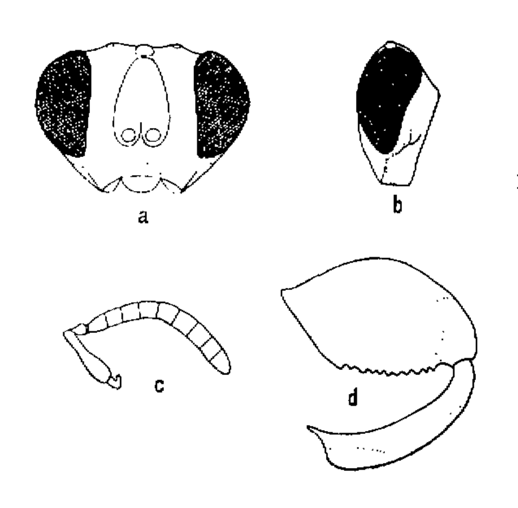


图2　芒市大腿小蜂

Fig. 2 *Brachymeria* (*Matsumurameria*) *mangshiensis* sp. n. (Female)
a. Head (frontal view); b. Head (lateral view); c. Antenna; d. Femur and tibia of hind leg.
a. 头（正面观）　b. 头（侧面观）
c. 触角　d. 后足腿节和胫节

2. 芒市大腿小蜂 *Brachymeria* (*Matsumurameria*) *mangshiensis*, 新种

♀ 体长4.3毫米，黑色，但触角末端黑褐色；翅基片黄色，基部褐色；翅透明，翅脉褐色；前、中足腿节末端和胫节两端以及跗节黄色，后足腿节末端和胫节近基部背面一点以及近端部背面1/4左右具黄色斑，跗节黄色，所有爪褐色；体毛银白色。头（图2—a）与胸约等宽或略宽于胸，正面观略呈三角形，颜面上部刻点粗密，刻点间脊窄而隆起，中部刻点微小，毛细密，触角洼上窄下宽，中宽约占颜面宽的1/2，洼底平坦，触角洼至唇基颜区部分有小三角形光滑隆区，触角（图2—c）棒节末端不呈斜切状，唇基缝不显，颜颊缝基部1/2隆起，无眶前脊，眶后脊（图2—b）不甚显著，并有若干分枝。胸部除中胸盾侧片上的刻点较浅疏外，刻点深而均匀，小盾片长宽大致相等，中部圆凸起，刻点较粗大，无光滑纵带，末端宽圆具凹缘，前翅亚缘脉为缘脉长的1.7倍；缘脉为后缘脉长的3倍；后缘脉为痣脉长的2倍，后足基节腹面具稠密刻点和鬃毛，内侧具较密的毛刷区，背面光滑无毛，后足腿节（图2—d）长为宽的1.5倍，外侧基、中部并沿背方达近端显著隆起，刻点密，腹缘具齿12个。腹部短卵形，侧面观圆弧形，末端近垂直，第1节背板光滑，仅在两侧略具少数稀疏刚毛小刻点；第2节背板大部分光滑，仅在基部有少数浅刻点，向两侧刻点逐渐增密，并具刚毛；第3至第5

节背板具细密刻点和刚毛，但中部较稀；第6节背板具鱼鳞状粗刻点和刚毛6—7道，呈环状排列，腹部的刚毛均长，呈羽状浅黄色，产卵器不露出体外。

正模♀，云南芒市，1956. Ⅳ. 21，黄天荣采。

本种与琉球大腿小蜂 *B.*(*M.*) *ryukyuensis* Habu 近似，但本种眶后脊分枝，触角索节由基至端略微变粗，后足基节背面具刻点和毛，而琉球大腿小蜂则光滑无毛，并胸腹节两侧有角突，前翅后缘脉之长为缘脉的1/3，故易区别。本种与 *B.*(*M.*) *taiwana* (matsumura) 亦近似，但本种眶后脊细并有分枝，前、中足转节黑色而非暗红褐色，后足胫节黑色，只近基部一点及近端部1/4左右具黄色斑，*B.*(*M.*) *taiwana* 后足胫节黄色只基部黑色故可区别。

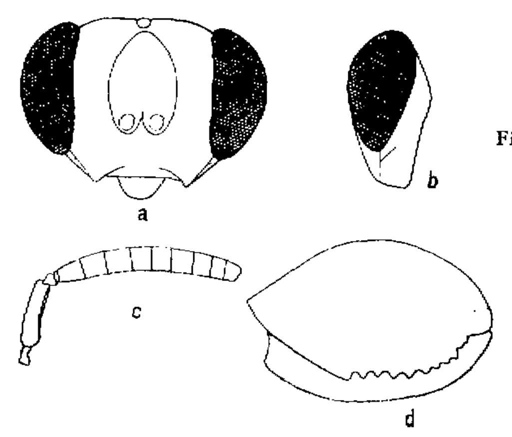


图3 金平大腿小蜂

Fig. 3 *Brachymeria* (*Matsumurameria*) jinpingensis sp. n. (Female).
a. Head (fronal view); b. Head (lateral view); c. Antenna; d. Femur and tibia of hind leg.
a. 头（正面观） b. 头（侧面观）
c. 触角 d. 后足腿节和胫节

3. 金平大腿小蜂 *Brachymeria* (*Matsumurameria*) *jinpingensis*, 新种

♀ 体长4.8毫米，黑色，但触角红褐色；复眼赭褐黑色，单眼琥珀红色；上颚端部褐色；翅基片黄色，基部黄褐色，翅透明，翅脉褐色；前足腿节端部和胫节两端黄色，中足腿节端部和胫节(除中部内侧褐色外)黄色，后足腿节末端具黄色斑，胫节近基部和末端1/3黄色，胫节基部和中部黑褐色；所有跗节黄色；腹部背板两侧、腹板及产卵器鞘呈红褐色。头（图3—a）稍宽于胸或与胸等宽，正面观明显横宽；触角（图3—c）棒节末端平截，中央稍内陷；颜颊缝（图3—b）明显，无眶前脊，眶后脊不伸到颊区后缘；唇基缝不明显。胸部刻点粗大，中胸不显著膨起，小盾片中后部中央略凹下，而两侧稍膨起，后端具凹缘且其顶端内陷成二叶状，前翅亚缘脉长为缘脉的2.5倍；缘脉又为后缘脉长的2.5倍；后缘脉为痣脉长的2倍。后足腿节（图3—d）腹缘具12个小齿。腹部短卵形，第1节背板光滑，仅两侧具少量毛和稀刻点；第2节背板中部具细刻点，两侧刻点较粗，毛亦长；第6节背板具鱼鳞状排列的粗刻点和刚毛，腹端背拱侧扁成脊，产卵器不露出体外。

♂ 体长4.5毫米。

正模♀，云南金平县，1956. Ⅳ. 6，黄克仁采；配模♂，1956. Ⅳ. 27，地点和采集者同上。

本种和琉球大腿小蜂 *B.*(*M.*)*ryukyuensis* Habu 及芒市大腿小蜂 *B.*(*M.*) *mangshiensis* sp. nov. 相近似，但和这两者的区别，主要在于眶后脊不达颊区后缘，小盾片末端内陷分成二叶状。它和前者还有以下的区别：后足腿节的黄色端斑较小；单眼区的宽度略小于复眼间距的 2/3，侧单眼间距约为侧单眼长径的 2 倍（琉球大腿小蜂只1.5倍）；颜颊缝完整；前翅后缘脉比缘脉的 1/3 为长；后足腿节内侧之毛比外侧为稀少；腹部第 6 节背板位于密集的巨型刻点间脊如小盾片的一样光滑，而位于头及胸部其它部分的刻点间脊，则具细微粗糙影纹。本种和芒市大腿小蜂间尚有下面一些区别。前翅各段翅脉间之比不同；触角红褐色，鞭节较粗大；后足腿节的黄斑很小，小盾片的宽比长大，而且中部不膨起（芒市大腿小蜂者长宽相等，中部膨起），而后端中部且略下沉，两侧则略微膨起，末端内陷呈二叶状，故可区别。

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A NOTE ON THE SUBGENUS *MATSUMURAMERIA* HABU OF THE GENUS *BRACHYMERIA* WESTWOOD WITH DESCRIPTIONS OF THREE NEW SPECIES FROM YUNNAN, CHINA

(Hymenoptera: Chalcidoidea: Chalcididae)

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The present paper deals with the result of study of the materials of subgenus *Matsumurameria* Habu in the collection of the Institute of Zoology, Academia Sinica. *B.(M.) ryukyuensis* Habu is a new record for China. With additional to *B.(M.) taiwana* (Matsumura) and *B.(M.) ryukyuensis* Habu, three species new to science from Yunnan province are given herewith, and a key to Chinese species of this subgenus is presented.

The type specimens are deposited in the Institute of Zoology, Academia Sinica.

Brachymeria (Matsumurameria) jingdongensis sp. nov.

This species is closely related to *B.(M.) criculae* (Kohl), but it can be distinguished from it in having hind coxa black with only reddish brown apically, hind femur orange red with smaller yellowish patch apically; tegula yellow with basal and upper brown to brownish black (tegula of *B.(M.) criculae* immaculate yellow). Frons beneath the scrobes smooth and with some longitudinal rugosities except large dots scattered along frontoclypeal suture and only parts beyond peristoma with silver dense pubescences, pits on scapulae and on axillae not faint but alike as on mesoscutum and scutellum. the tip of scutellum emarginate, and the sixth tergite rough with eight transverse rows of pits and pubescent. Holotype: ♀, Allotype: ♂, Paratype 1 ♂. Yunnan, Jingdon County. Apr. 4 1974, Mao Jin-Long.

Brachymeria (Matsumurameria) mangshiensis sp. nov.

* The previous spelling was Liao Tingshi

This species is allied to *B.*(*M.*) *ryukyuensis* Habu, but differs from it in having the following characteristics: Postorbital carina branched, frontogenal suture carinate completely, funicles gradually increase their diameter from base to tip, the dorsal aspect of hind coxa with dcts and pubescent, propodeum strongly declined posteriorly and with angulate at lateral sides, the length of postmarginal vein of fore wing one-third as long as marginal. This species is related to *B.*(*M.*) *taiwana* (Matsumura) also, but it can be distinguished from the latter in having postorbital carina rather faint and branched, fore and middle trochanter as well as hind tibia black with rather small yellow patch subbasally and about 1/4 yellow patch subapically. (hind tibia of *B.*(*M.*) *taiwana* yellowish with black basally). Holotype: ♀, Yunnan, Mangshi City. Apr. 21 1956, Huang Tian-Rong.

Brachymeria (*Matsumurameria*) *jinpingensis* sp. nov.

This species resembles to *B.*(*M.*) *ryukyuensis* Habu and *B.*(*M.*) *mangshiensis* sp. nov. It differs mainly from both in having postorbital carina not reaching the genotemporal margin; scutellum with two lobes apically, and the apical yellow patch of hind femur smaller. It differs from the former in having width of ocellar area slightly shorter than two-third as wide as interocular space at level of hind ocelli; interocellar distance two times as wide as major axis of hind ocelli; [interocellar distance one and a half times as wide as major axis of hind ocelli in *B.*(*M.*) *ryukyuensis* Habu]; frontogenal suture carinate well [it is not carinate below eyes in *B.*(*M.*) *ryukyuensis* Habu], postmarginal vein longer than one third times of marginal; hairs of inner surface of hind femur rather thin than in outer; intertice of compact dots on 6th tergite smooth as on scutellum, Intertice of dots on head and thorax with delicate sculptures. This species differs from the latter species in having also those characteristics as following; the ratio of veins on forewing different; antenna reddish brown, and flagellum rather gross than in *mangshiensis*; the width of scutellum distinctly longer than its length and middle of which does not convex; the post median part of the scutellum depressed and slightly convex laterally, scutellum with two lobes apically.

Holotype: ♀, Yunnan, Jinping County, Apr. 6 1956, Huang Ke-Ren.

Allotype ♂, Yunnan, Jinping County, Apr. 27 1956, Huang Ke-Ren.

Key to Chinese species of subgenus *Matsumurameria* Habu

1. Preorbital carina absent. Postorbital carina present 2
   Preorbital carina absent. Postorbital carina absent. Abdomen black with lateral margin of tergites, epipygium, hypopygium and ovipositor sheath blackish red. Hind coxa black with reddish brown

apically; hind femur and tibia orange red, the apical yellow patch of hind femur rather small; hind tibia with ventral surface violet brownish black and with yellowish colouration apically and subbasally. Tegula yellow with brown to brownish black basally and dorsally. Scutellum with tip emarginate……………………………………………………………*B.(M.) jingdongensis* sp. nov.

2. Hind tibia yellow with black colouration basally. Clypeus fused dorso-medially. Only smooth short anteclypeus visible……………………………………………………*B.(M.) taiwana* (Matsumura) (Hainan)

Hind tibia black with yellow patch subbasally and apically ……………………………………………… 3

3. Postorbital carina complete, reaching the genotemporal margin……………………………………………… 4

Postorbital carina incomplete, not reaching the genotemporal margin……*B.(M.) jinpingensis* sp. nov.

4. Postorbital carina simple, without branches…………………………*B.(M.) ryukyuensis* Habu (Jiangxi)

Postorbital carina delicate and branched…………………………………………*B.(M.) mangshiensis* sp. nov.

Key words

Brachymeria Westwood
Brachymeria (Matsumurameria) new spp. Yunnan, China.
Brachymeria (Matsumurameria) jingdongensis sp. n.
Brachymeria (Matsumurameria) taiwana (Matsumura)
Brachymeria (Matsumurameria) jinpingensis sp. n.
Brachymeria (Matsumurameria) ryukyuensis Habu.
Brachymeria (Matsumurameria) mangshiensis sp. n.
Yunnan